## City of Santa Barbara's Participation in Energy Freedom Challenge

## Energy Freedom Challenge

- The City of Santa Barbara is participating in a nationwide Energy Freedom Challenge. The Energy Freedom Challenge is a multi-year, nationwide contest for U.S. cities to obtain more than 50% of their electrical energy from clean renewable sources, such as solar, wind, hydropower, biomass, geothermal, and fuel cell. During the first year, the scope of the contest is limited to electrical energy usage by the city organizations for their internal and operational needs.
- By entering the first year of the national competition, the City is a Founding City of the Energy Freedom Challenge, along with 13 other cities. Other cities include Eugene, OR, Boulder, CO, Santa Monica, CA, Alameda, CA, Portland, OR, Austin, TX, and San Diego, CA.
- The competition is administered by Solar Austin and the Union of Concerned Scientists, non-profit organizations that have received funding from the U.S. Department of Energy to sponsor the contest.
- The goal of the contest is to encourage the development and purchase of renewable energy, which will reduce greenhouse gases and mitigate the effects of global warming and climate changes.
- Mayor Marty Blum said "The City of Santa Barbara is excited to participate in the nationwide contest. I'm confident that our organization will rise to the challenge of 50% renewable energy."

## Where do we stand now?

- The City organization is a significant electrical energy consumer with the operation of several major public works facilities, an airport, harbor, and buildings that house various services to the public.
- In the first year of the contest, the City was asked to compare renewable energy usage as a percentage of the City's total electrical energy consumption between 2004 and 2005. Annual renewable energy use by the City organization has jumped from 16% to 23% between 2004 and 2005 (see table below).

	2004	2005
Total Electrical Energy Use	25,122 MWh	24,918 MWh
Renewable Electrical Energy Use	4,019 MWh	5,712 MWh
% Renewable Energy	16%	23%

- A large portion of the City's renewable energy is obtained as part of Southern California Edison's standard mix. The increase in renewable energy in 2005 is attributed to the introduction of fuel cell technology at the El Estero Wastewater Treatment Plant in November 2004 with a .65 MW capacity.

- The goal of achieving 50% renewable energy is a challenging goal that will require implementation of innovative technologies and an overall reduction in energy use in upcoming years.

## Key Projects

- The City is initiating a number of projects to generate renewable energy. City Council approved funding for the installation of solar panels on Fire Station #2 as part of a large-scale remodel in June 2006. Staff is also preparing plans for installing solar panels on the roofs of City offices at Garden and Laguna Streets.
- The City hopes to set an example for businesses and residents in the community. The City is participating in an Energy Partnership with Southern California Edison to help the community reduce overall energy consumption by 20%.